The **Turning** Point

A Novel about Agile Architects
Building a Digital Foundation

by Stephanie Ramsay,
Kees van den Brink,
and Sylvain Marie

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Preface

The Open Group Press

The Open Group Press is an imprint of The Open Group for advancing knowledge of information technology by publishing works from individual authors within The Open Group membership that are relevant to advancing The Open Group mission of Boundaryless Information Flow™. The key focus of The Open Group Press is to publish high-quality monographs, as well as introductory technology books intended for the general public, and act as a complement to The Open Group Standards, Guides, and White Papers. The views and opinions expressed in this book are those of the authors, and do not necessarily reflect the consensus position of The Open Group members or staff.

The Open Group

The Open Group is a global consortium that enables the achievement of business objectives through technology standards. Our diverse membership of more than 800 organizations includes customers, systems and solutions suppliers, tools vendors, integrators, academics, and consultants across multiple industries.

The mission of The Open Group is to drive the creation of Boundaryless Information Flow™ achieved by:

- Working with customers to capture, understand, and address current and emerging requirements, establish policies, and share best practices

- Working with suppliers, consortia, and standards bodies to develop consensus and facilitate interoperability, to evolve and integrate specifications and open source technologies

- Offering a comprehensive set of services to enhance the operational efficiency of consortia

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The Open Group publishes a wide range of technical documentation, most of which is focused on development of standards and guides, but which also includes white papers, technical studies, certification and testing documentation, and business titles. Full details and a catalog are available at www.opengroup.org/library.

Foreword

The great benefit of this novel is that it presents a practical application of industry open standards, used in combination; not in the dry *factual* style that you often see in such an exercise, but in a funny and engaging story with a great cast of characters.

It is 20 years ago this year that we began toying with ideas to better support Enterprise Architects in expressing their designs, allowing them to move away from unclear pictures in typical office productivity tools toward proper models that allow visualization and analysis from different angles and for many purposes. By 2002, these ideas had become formalized into the ArchiMate® R&D project that I managed at the Telamatica Instituut in the Netherlands. These efforts evolved and ultimately produced The Open Group ArchiMate Standard. In this novel, the ArchiMate Standard is used in conjunction with many other standards from The Open Group, including the TOGAF®, IT4IT™, DPBOK™, and O–AA™ Standards.

The Turning Point builds upon one of the core demonstration cases from the ArchiMate world – the fictitious but realistic insurance company, ArchiSurance. This case study has been extended over the years and in this novel you will read how ArchiSurance is now using Agile Architecture practices in support of its "Digital Customer Intimacy" strategy, which is going to take the company to a new, fully digitized operating model. You will follow the daily life of Kathleen Stone, Chief Architect of ArchiSurance, and her colleagues, and see how they deal with all kinds of challenges, ranging from governance in an Agile context to cybersecurity issues, and from funding discussions to managing technological complexity.

I hope you will enjoy this novel as much as I did. I think it is a great introduction to architecture practice and the valuable role that standards can play in it. It will appeal to both novices in the field and to experienced architects who want to know more about the benefits of these standards, and how they can be used together to great effect.

Marc Lankhorst
Managing Consultant & Chief Technology Evangelist, BiZZdesign
Enschede, The Netherlands
June 2021

A Note from the Authors

This is a novel from The Open Group Press: *The Turning Point: A Novel About Agile Architects Building a Digital Foundation.*

The novel is about a fictional company on a Digital Transformation [1] journey. The story is seen through the eyes of the main character, Dr. Kathleen Stone, Chief Architect for ArchiSurance. Kathleen and her team uncover many of the typical problems faced by companies as they make decisions to deploy digital technologies.

The story describes the foundational work necessary for companies that would like to deploy digital technology at a faster pace. It describes the difficulties that companies encounter due to organizational structures that have caused redundant roles, processes, information, and tools over the course of many years. This is frequently the case when functional groups focus on their own goals *versus* common outcomes across value streams. The ArchiSurance Digital Transformation calls for a new way of working in cross-functional teams that align with the flow of work and new technology being deployed.

The authors enjoyed reading the books "The Phoenix Project" [2] and "The Unicorn Project" [3] and have taken a similar approach for this Digital Customer Intimacy story; an easy read that provides guidance for a Digital Transformation. Many of The Open Group standards are used throughout the story to solve complications that arise during the ArchiSurance Digital Transformation. The TOGAF® framework, the IT4IT™ Reference Architecture, and the ArchiMate® modeling language are the primary standards featured.

The story will appeal to many roles in a company because it explains how Enterprise Architecture helps to characterize the work that needs to be accomplished by the organization to drive a transformation initiative. Many of the details and artifacts that were generated are provided in the Bonus Material.

At any time you can refer to the following list of the characters in the story to remind yourself of the roles they play in the transformation journey.

Cast of Characters, in Order of Appearance

Dr. Kathleen Stone	Chief Architect
Dick Masterson	Chief Information Officer (CIO)
Amy Lee	Agile Coach, External Consultant
Sven Stone	Kathleen's Husband
Tony Gonzales	Kathleen's Assistant
Terri Nichols	Business Architect: Develop Products
Rakesh Gupta	Business Architect: Market and Sell Products
Greg Morrison	Business Architect: Manage Policies and Claims
Philip Potter	Business Architect: Serve Customers
Chris Keller	Domain/Solution Architect: Big Data
Brad Nelson	Company President (CEO)
Carl Highfield	Domain/Solution Architect: Cloud
Sarah Condor	Head of Program Management Office (PMO)
Jamar Johnson	Domain/Solution Architect: IoT
Ben Cohen	Business Analyst
Hans Pickle	Program Manager
Craig Evans	Product Owner
Jasmine Williams	Customer Relations Manager
Nick Ross	Lead Business Architect
Brutus	The Dog
Bart Sanders	Security Guard
Fiona Hoekstra	Chief Financial Officer (CFO)
Steve Nunn	President and CEO of The Open Group

The Open Group (2021)

About the Authors

Stephanie Ramsay

Stephanie Ramsay (www.linkedin.com/in/stephanie-l-ramsay/) has worked for more than 30 years in Information and Digital Technology, with extensive experience in Service Delivery, Applications, and Infrastructure in three industries (Defense, Healthcare, Retail). Her education includes: a Bachelor of Science in Business and a Master's degree in Supply Chain Management and Architecture Certifications. She is a leading authority in Business Architecture and Product/Service Integration with strong competencies in Enterprise Architecture, Portfolio Management, Business Relationship Management, Service Management, Sourcing & Supplier Management, and Program Management. Stephanie is an active member of The Open Group IT4IT and Architecture Forums. Her hobbies include: writing, hiking, and travel.

Kees van den Brink

After being an officer in the Merchant Marines, Kees (www.linkedin.com/in/keesvandenbrink/) started his career in IT as a developer working in a team to maintain a network administration system. Over time, Kees has been a Sales Engineer, a Solution Architect, a Platform Architect, an Architecture Practice Lead, and an Engagement Lead. Currently, Kees works for ServiceNow and is managing a team of Platform Architects for the northern part of Europe. Throughout the larger part of his career, Kees has been working on solutions related to managing the different parts of the IT Department; for example, IT Project, Program & Portfolio

Management, IT Service Management, and IT Operations Management.

Kees strongly believes IT should be regarded as a utility, just like electricity and water, enabling businesses to interact, optimize, and innovate. As a user/consumer of products with IT components, there should be no concern about how IT is delivered; it should be consumed according to choice. In his view, an important prerequisite is standardization in the way IT is delivered, fueled, for example, by cloud and containerization. This means a shift to thinking in products and value streams and how they are used to help an organization on their digitalization journey. Kees is a strong believer, therefore, in initiatives that help to bring standardization to life, like the IT4IT Standard, which he helped to establish and maintain.

Sylvain Marie

Sylvain Marie (www.linkedin.com/in/sylvain-marie-b101341) has worked in Information Technology and Service Delivery for more than 30 years as a consultant. 15 years ago, he extended his experience in the field of Enterprise Architecture and is now a leading IT4IT architect. He is TOGAF Certified, certified in IT4IT Foundation and Business Architecture, and is an ITIL expert. He has been involved in ITSM and IT4IT consulting projects in major European companies. He also likes to share his experience in using the TOGAF and IT4IT Standards, and ITIL as a trainer and as an active member of The Open Group. During his free time, he likes to play jazz piano in his jazz quartet.

Dedications

To my co-workers who inspired content for this book and to my significant other, Scott, for his patience during the writing of it over the course of many weekends. ~ Stephanie

To Jolanda and Don who never complained when I decided to spend yet another hour locked away in my study, writing this book. ~ Kees

To all my colleagues and managers at Arismore then Accenture that gave me the opportunity to work on such interesting topics as the TOGAF and IT4T Standards. ~ Sylvain

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Chapter 1. Digital Customer Intimacy Strategy Kickoff

Dr. Kathleen Stone, Chief Architect for ArchiSurance, wakes up bright and early, before her alarm clock goes off, excited about her presentation at the town hall meeting later that day. Her moment to shine has finally arrived. Today she will be unveiling a new Business Architecture that will enable the company's digital strategy. Her Enterprise Architecture team has done a tremendous job working with the organization's stakeholders to build out the strategic plan. It has been an intense period, but Kathleen is happy with the objectives that will move the organization from functional silos to holistic operational value streams. The Business Architecture comprises a new organization map that aligns to the development of digital products and services within the value streams. She will tell the story of how this new organizational structure can change the company culture, moving it away from one with functional silos to one where teams work together toward common goals and business outcomes. This organizational work, with its accountability framework, is a key building block for Digital Transformation [4].

The first digital strategic theme identified in the Architecture Vision is "Digital Customer Intimacy". It will employ Big Data and Internet of Things (IoT) technologies to help support the organization in deeply understanding the company's customers and their wants and needs. The number one customer complaint for years has been that service calls get transferred from one department to the next and nobody seems to be able to help, or has accountability for dealing with problems. Customer orders and requests for service seem to get stuck unless they call and find someone to move things along. The cross-functional team structure Kathleen is proposing has the potential to eliminate thousands of hours a week of wait time in queues by reducing the need for specialist teams to exchange work orders and tickets. It will also unlock data and information that has been hidden away in disparate systems as functional groups begin to work across value streams. As the information begins to flow it will be easier to identify the common systems of record that are critical for product delivery. Application rationalization was also identified as an opportunity that will eliminate an enormous amount of duplication and redundancy. This will strengthen the company's *"shared customer insights by configuring the people, processes, and technology to learn what customers want"* [4]. This is all foundational work that must occur before deploying the new technologies that will digitize and transform the enterprise [4].

All of this has been characterized in the Business Architecture that Kathleen will be presenting in just a few hours. As she thinks about the phenomenal value the cross-functional structures and team of teams will bring ArchiSurance, she wonders why it has taken so long to get here. She knows the most important thing she can do today is

to highlight the value to the consumer and the overall product satisfaction that can be gained very quickly once ArchiSurance begins to organize itself in cross-functional teams across key value streams.

Failed Digitalization

Still waiting for the alarm clock to ring, Kathleen's mind wanders back to the meeting she had with Dick Masterson, the CIO of the company, and the chain of events that changed her life just four weeks ago. Kathleen had tried again to convince him to mandate the TOGAF® Architecture Development Method (ADM). She strongly believed that this would help her to get some order in the chaos of all the digital initiatives. She had been trying to get his attention on this topic, but their meetings were cancelled due to "other more pressing issues". Little did Kathleen know that the ADM mandate was just a small issue. Finally, Kathleen was able to meet with Dick late in the afternoon on Tuesday ...

Kathleen remembers she opened the meeting with a thank you to Dick for taking the time to listen to her ideas on getting the digital initiatives in order. She noticed Dick appeared tired and asked him if she could buy him a cup of coffee. Dick agreed and they walked over to the cafeteria while Kathleen anxiously kept telling herself not to let this opportunity for getting architecture standards in place slip by!

They sat down at a table next to the window.

"You seem tired," said Kathleen. "May I ask what's on your mind?"

Dick was not normally the type to share his problems, but apparently this time was different.

"Actually, Kathleen, I am worried. Worried about my job. Remember a year ago, when the company announced the merger of the three companies? One of the main drivers was the opportunity to transform the business. Get the company into shape for the future. I guess you know the business decided to invest in a program of digitalization, which was driven by the Business Units themselves. All kinds of teams were organized, and every Business Unit started "digital product" projects. I can tell you, most of the projects had great ideas and had great starts, but after one year, none of these intended projects have realized any value. Since we invested 30% of the budget in new hardware to support all those projects, we have reached the end of the $10 million budget. Apart from a large number of new racks in our data centers with idle running machines, we have nothing to show for it! And compounding that, there are now even more types of technology running in the data centers causing us to have to manage even greater complexity for no value. All this was justified on the premise of 'we need to be Agile' or 'it's the new industry favorite', or 'we must stay current'."

Dick sighed and looked out the window. "From my perspective, in the past year we have managed to designate just about everything there is on the market as a corporate standard! Perhaps we can stop producing company technology standards and just say: 'We have standardized on everything'. It is driving the Operations team to breaking point. I don't think it will be long before we will have a Priority 1 (P1) incident that will disable the company for days simply because there is not enough time to both support the projects and maintain the technology environment they depend on. My only hope is that the P1 will not be a data leak."

Looking 10 years older, Dick faced Kathleen again and continued. "I don't need to explain to you that our company investors are starting to demand changes. Simply said, the digitalization project has failed, and our legacy systems are running on fumes. Unfortunately for me, everybody is pointing to me since it is a technology issue. Problem is, I had no control over the approvals and decisions being made. Each time I tried to get a project reviewed by my team before the business initiated it, the response was, 'Oh, we're Agile, so no need for you to review. If we need to adjust, we can do so because of our new way of working'. You know, our teams have been working very hard to implement Agile practices, but instead of enabling transformation, we only managed to change from a traditional project delivery to scrumming during the project execution. I'm wondering why it's so hard for us to get beyond this change."

Kathleen listened, realizing that her problem of not being able to get a proper architecture from all the initiatives was not even close to the size of the problems that Dick faced. She started to feel very sorry for him.

"But let's talk about something else," Dick said, with a weak smile. "What is it you've been wanting to discuss with me for the last two weeks?"

Actually, four weeks, thought Kathleen, but who's counting? She took a deep breath and went for it.

"Well, when this Agile way of working was introduced, it also created a problem for me. I have been struggling big time to get an understanding of the architecture the company would end up with. The real issue is not that we are becoming Agile, it is the fact that our Enterprise Architecture has not followed suit. To really become an Agile workplace, our architecture needs to be incremental, with enough runway to be in sync with development. We also need to architect organizations and people in accordance with the flow of work across value streams. For the past year, we have been constantly chasing information, and when we got something it was incomplete, out-of-date, and, frankly, a lot of times conflicting. The way we see it, it's like trying to help a team of mountaineers to reach the top of a mountain safely without knowing which peak they are climbing, and without having a joint base camp to assemble the team for the climb. The consequence is that every team member is building their own

base camp at a different location and targeting a different peak to climb, which increases, not decreases, the risk of failure.”

“So, you mean to say there is no vision and no understanding of the current state?” Dick asked. “I can relate to that. I have been trying to tell my counterparts in the Business Units the same thing. We need to think about where we are now, and where we would like to end up before we start. Unfortunately, the response is always: ‘We have our vision, please do not worry about it. We do not want to be held back by past ways of working – that just slowed us down when we needed to run fast and make changes to keep up with market demand. So, please, just focus on supporting our projects where you can and leave the rest to us’.”

“Exactly,” replied Kathleen. “We get similar push back. And honestly, my team is starting to give up. They are being told that ‘old style architecture is not needed when working Agile’. I know some of my team is actively looking to find a job somewhere else. And if that happens, I think we as a company will lose a lot of tribal knowledge and that will set us back in time even more. You know, once we collect the information and put it together into a holistic view, the end architecture shows how disconnected everything is. When viewing just one project it seems very much OK, but as soon as you look across all projects, well …” Kathleen hesitated, unsure if she should be this nakedly critical. “A while back I read an article referencing work done by Mike Sutcliff and his co-authors [5] who conducted a survey among 1,350 executives to discover why Digital Transformations fail [6]. The number one reason given for failure is unspoken disagreements between top managers about goals. The authors recommend a need to ‘*define and articulate not only the opportunity but also the problem it solves, and how the company will build the organization around the desired solution before investing*’.”

“I get it,” replied Dick. “And I agree; we as a company are an example of such failure. But the more interesting question is: ‘How to correct it?’. We have lost a year, sunk a whole lot of money, and everybody is blaming Operations while my organization was barely able to keep up with the demand for the infrastructure and the constant need to patch up the old systems.”

“Sure, I understand,” said Kathleen. “You know, before the merger, as architects we were using an architecture methodology based on The Open Group TOGAF framework, using the elements fit for our company to develop the relevant architecture artifacts. This approach helped us to understand stakeholder concerns and develop solutions, while keeping the different parts of the company aligned. Sure, I know we couldn’t always produce quickly enough, but we did prevent chaos.”

Gaining momentum, Kathleen continued, “As you know, ArchiSurance is a member of The Open Group. So, when I started to notice the difficulty in maintaining the architecture across all the new “Agile” work popping up, I decided to use our

membership benefits to interact with the architecture-related forums there and check what their response might be. Luckily, they had identified this concern as well. In fact, they have been busy defining a standard to help organizations understand the importance of architecture when shifting to Agile at scale. This is the Open Agile Architecture™ Standard (also called the O-AA™ Standard) [7]. It is perfect for us because this is what we are going through. When I started to digest their ideas, I learned a lot in hindsight about what we've done wrong."

Dick was listening, but he didn't look convinced. Kathleen carried on.

"One," she said, holding up her hand and raising a finger to start counting the challenges. "There is no shared vision on which to base our strategy to become a digital company. All we have done is add an app to our existing products [8] and thrown the result over the wall to Operations to run and maintain them. Two," she continued without pausing. "It became apparent that we as a company have shifted our architectural development style, but I do not believe we have been able to find the right balance between intentional and emergence.[1] Three," she announced quickly as Dick began to raise his eyebrows. "We failed to shift from projects to products [9]; every Business Unit chased one idea after the other based on what I consider the 'feature of the month', assembling and re-assembling teams into project after project. And last but not least," Kathleen began to conclude as Dick started to shift uneasily in his seat, "on top of all that, we organized the teams along the lines of the traditional business function, which inevitably created a system aligned with traditional thinking. We should have started with understanding the business domains and the products for those domains and then organized the teams along those lines. There's a name for doing things in this, the preferred, way. It's called the Reverse Conway Maneuver and it results in organizing into stream-aligned teams [10]. You know," said Kathleen as Dick opened his mouth to speak, "I have come to realize that we have adopted Agile practices in the development of these apps, but did we really look at the necessary transformation the enterprise should go through? Did we make the enterprise itself Agile? Did we miss a key point that Digital Transformation starts at the business level, not with the latest technology? Did we transform to become a digital enterprise? Did we prepare our workforce with the skills and ways of working that would help them understand how the business is changing?" Kathleen ended in a flourish with a series of rhetorical questions and finally stopped to give Dick a chance to respond to what she had exposed so far.

"This is typical." Dick said curtly. "Whenever you experience a problem, you try to understand it with a lot of academic input. I get your point, but ..." – and he spat out each word with emphasis – "... I – can – not – go – with – this – type – of – theory to my business counterparts! They will dismiss it as too academic – it just won't work here, Kathleen."

Pulling back a little, Kathleen conceded. "OK, I always thought this type of

background would be required to make people understand that our ideas were well-grounded?”

“Yes, it is,” replied Dick. “However, the time to talk about the theory is over. What if we can just start doing what you describe, instead of trying to explain it?”

“Well, there are a number of things we can do to start those changes right now,” Kathleen suggested. “And we are not alone on this. Three days ago, I met with Amy Lee, one of the Agile coaches hired by the business in an attempt to get help in collecting the architecture artifacts from the Agile teams she’s coaching. We ended up talking about the situation we are in. Amy agrees with my observations. In fact, she urged me to speak up about them, to make sure it is something the whole organization recognizes, and to build up the realization that it is not just about adopting a couple of practices; it is about transforming the enterprise. So, this means we need to get executive approval from as high up as our CEO if possible, for a sort of reset. Do you think you can convince Brad to give us the space to try and help?”

For the next two hours Dick and Kathleen worked to define a plan using a lead-by-example approach and discussed how to convince Brad to give them the approval they would need. They agreed to keep the academic part far out of sight. Kathleen made a mental note to consult with Amy again to check if she could offer some guidance. They stood up, finally, to go their separate ways.

“For the first time in a long time I feel a little more energized,” said Dick. “I’m starting to see a way out.” Kathleen nodded and smiled.

“But, you know” he quipped, “we are betting our careers on this method succeeding, right? So, hey, no pressure!”

And then he was gone.

Building the Vision

Nearly a couple of weeks later, Kathleen sat alone in the cafeteria eating a late lunch. Despite its abrupt and slightly threatening ending, that meeting with Dick had been the motivation she’d needed to rally her team behind the idea. She could clearly see how they could use the TOGAF ADM to help turn things around. The trick, she and Dick had agreed, was to assume leadership and show results, but not force the language of the architects on the rest of the organization. The team had worked hard to build a vision to digitalize the company and define the corresponding organizational setup to deliver this vision. Still, she felt she was missing something.

Suddenly Kathleen was woken out of her train of thoughts by somebody saying, “You seem far away. A penny for your thoughts?”

Kathleen looked up. It was Amy, standing next to her with a tray.

"Mind if I join you?" she asked with a smile and, without waiting for an answer, she slid into a chair on the opposite side of the table. "So, what's keeping you from enjoying your food like people normally do?"

"Nothing," Kathleen said, letting out a sigh. "I'm just considering the fact that I have promised to help somebody, but I'm getting stuck and probably won't be able to help. I have this nagging feeling I'm missing something."

"Ah, I understand," said Amy. "I guess the conversation with Dick was positive, but you feel the task is too much to handle?"

Kathleen looked up. How could Amy know of her conversation with Dick? But before she could ask, Amy continued. "Have you considered you are falling into the same trap as always?"

"No, we are not!" replied Kathleen, somewhat annoyed. "We studied all the material available and are doing everything we need to do. We have defined the new vision and strategy for the business model and the products we need. We've started to align the organizational setup required to build and maintain the solution. We are going to create the necessary designs. All of this has been achieved in less than two weeks. I am very proud of my team and I think we have done a –"

"Exactly!" said Amy, with some concern in her eyes. "I rest my case."

Kathleen halted her monologue and looked bewildered at Amy. "I ... I ... Well, this is something," she stumbled. "Last time we spoke you urged me to speak out and I did, so where is the problem?"

"Well," said Amy calmly, "you did speak out, but within your own bubble, or silo. If I am right, outside the Architects team and Dick, there is nobody else involved in the grand design you are talking about. In fact, as I see it, you have locked yourself and your team into a room for the past ten days and came up with an architecture. And I can only guess you are going to continue to design the details so you can plan the transformation of ArchiSurance for the next year or so, which you are planning to present at the next town hall meeting?"

Kathleen sat back and shook her head in disbelief. How could Amy know this was her plan? "Well, yes. Exactly! It's what will be needed to convince the leadership to transform: a well thought through plan, with a clear goal."

"Sure," Amy replied, with a slight shrug. "That is how it always has been done. Was this not also the way the current ArchiSurance digitalization plan was agreed upon?"

Kathleen stopped talking and started to laugh. "So, you mean you think I am losing my mind?"

"No, no, no," said Amy, with alarm. "That is not what I meant."

"I know," Kathleen replied with a big smile. "But to quote Albert Einstein, the definition of insanity is doing the same thing over and over again and expecting different results."

Amy started to laugh as well. "Not exactly what I meant, but it does apply. The issue is that it is best to prevent BDUF."

"BDUF?" Kathleen asked.

"Yes, Big Design Up-Front: trying to iron out everything to the detail, spending months on it, and in the end being overtaken by reality once implementation is starting. You should not drive a transformation like this with a BDUF. You should try to find the right balance in providing guardrails for the transformation *versus* room for concepts like emerging design."

With the tension broken, Kathleen shifted gear. "So, thinking it through, I believe we are doing good things but, as I said, I believe there is something missing. Any idea what that could be?"

Amy considered the question for a couple of moments before replying. "As you know, what drives the transformation of ArchiSurance is the increasing demand to improve the customer experience; being able to adapt to changing market conditions and improving customer intimacy. The best way to achieve this is to become both more digital and more Agile. So, we need to establish both a Digital and an Agile Transformation. The current approach and the approach you are defining now contain a lot of good things, but they are not addressing all seven levers of such a Digital Transformation [11]. What is needed is to frame the problem statement and the necessary operational steps to realize the strategy. Transforming the delivery of digital products is in the middle; realizing the agility, efficiency, and decision support goal." Amy paused to check Kathleen was with her so far. Kathleen nodded and Amy continued with her assessment.

"The problem with the current approach is that the transformation is mostly happening at the individual and team level. Teams are adopting Agile practices to work differently and, I can tell you, I am spending a lot of hours consulting the different teams on this topic and they are changing. But, it does not address Agile at the enterprise level. There is no Lean or Agile leadership that drives this transformation. So, the problem with your current plan is that it is mostly addressing the solution space – defining the business model and the platform. However, it contains too much inside-out thinking and doesn't address the actual problem space."

"OK," said Kathleen slowly. "So, how do we change this?"

"First, I would involve the business in defining the strategy and the plan to achieve this. Given that ArchiSurance intends to define new products around customer intimacy, you could apply design thinking and journey mapping to define the problem and scope the solution. You can also start to develop a shared purpose and accountability across all levels of the organization by involving those that need to execute the plan in the planning process; for example, using catchball. And as we discussed earlier, I would certainly urge you to stay away from the normal architecture practices and allow the architecture to be built iteratively – so no BDUF, just enough to provide guardrails for the teams."

Amy and Kathleen decided one of the main elements was to correct some of the organizational setup mistakes that had resulted in the plethora of independent project teams, structured according to the existing organization.

"We need to make sure," said Amy, "that we organize ourselves for the outcome we want to achieve, because organizations typically design the systems that mirror their communication structure.[2] So, if the current system is not what we want, we should start with looking at the organization and applying the Reverse Conway Maneuver."

They identified the initial concepts of the end-to-end value streams from a customer perspective, and the products that needed to be delivered, which could help the organization shift from thinking in delivery of projects to delivering products.

By the end of the afternoon, Kathleen had a clear picture of how she would be able to define the plan to achieve ArchiSurance's intent to become more digitalized.

"This is great," said Kathleen, as they prepared to leave. "You've really helped me to see how this can be done, but I do need to get back to Dick to ask him to talk to Brad to get everybody aligned in helping out."

"Oh, don't worry about Brad. I don't think that's necessary. Just take the lead and show the way," Amy replied, walking away and leaving Kathleen puzzled. However, over the next few weeks, everybody started to align and contribute without the need for Kathleen to force participation.

Kathleen and her team of architects had set out on the task and conducted interviews and workshop sessions with business representatives, using design thinking to set the goal for the Digital Customer Intimacy theme. This solidified the initial concepts and adjusted them based on collaborative learning. In the background, her team had dutifully used the information to build the necessary architecture artifacts and, as she kept reminding them, with just enough architecture to help the organization to progress: "We need to make the architecture emerge out of our collaboration."

It was a new experience. Normally, she had to beg for time from the business stakeholders to involve them in workshops and in the design reviews, but this time it was as if they all wanted to be involved.

All, that is, except for Hans Pickle, who kept insisting that his team, which was working on the replacement of the Prolongation Application (or as everybody else called it, the "Big Ludicrous Old System", or the "B.L.O.S.", application), was to be left alone and outside of the change. His team had now been working on this replacement for 14 months and his argument was that the investment in it was too big to change direction and they would need only another two to three months to be able to release their work. And, according to Hans, "My team is the most experienced Agile team in this company, they have been scrumming now for over a year, so you do not need to touch this area; we are as Agile as it can get."

Kathleen recognized that Prolongation was one of the capabilities of the value stream to manage the lifecycle of a sold contract, and she would have preferred to make it part of the Manage Digital Customer value stream. Numerous attempts at trying to change Hans Pickle's mind, however, had failed to work and Kathleen decided to compartmentalize the Prolongation area and work around it, making the B.L.O.S. its own value stream. She felt, personally, that the focus on replacing the B.L.O.S. was not correct. In all her conversations with the business about any changes required, the B.L.O.S. system was never mentioned. Sure, there were issues, but they had to do with providing information to help the conversation with the customer, and not the functionality of the core system itself.

All in all, they had spent only four weeks building the first iteration of the Architecture Vision and the Business Architecture (see **Bonus Section A** and **Bonus Section B**). Together, these represented the architectural intent for ArchiSurance in its quest to become more digitalized, and showed the corresponding organization that would be required. They had been able to use the new way of doing architecture.

Now, feeling confident that the architecture built so far would be compelling, it was time to lift the curtain and get the whole organization behind the initiative.

The alarm clock finally begins to buzz frantically, snapping Kathleen out of her reverie about the origins and impetus for today's exciting presentation. Next to her, Sven, her husband, groans and mumbles in complaint.

"Why always so early, Kathleen? When will you get a normal job with a normal schedule?"

Kathleen kisses him and pulls the sheet over his head to help block out the lights as she turns them on. She's still thinking through her presentation as she brushes her teeth. And after running the presentation over in her head several more times,

Kathleen finally grabs a piece of fruit from the kitchen and heads out the door. It would not hurt to be at work early today.

Presenting the New Structure: Flow of Work

Kathleen arrives and sees that several members of her team, Tony, Terri, Rakesh, Greg, Philip, and Chris, are in early as well. She greets them with a wide smile, and they all grin back knowing that this will be a historic day for ArchiSurance, a day that will change the company dynamics forever. The team is particularly excited about the seven core principles they have come up with around the theme of "Working Together to Drive Our Digital Transformation". These principles will be a key message in the presentation to leadership:

- Focus on the consumer experience; exceed expectations

- Empower cross-functional teams; enhance accountability

- Drive toward shared outcomes; collaborate on goals

- Optimize information flow; uncover data for business insights

- Deliver on time with quality; create rapid feedback loops

- Practice value stream thinking; eliminate constraints

- Reduce core systems; rationalize redundancy

With only about 30 minutes until showtime, Kathleen makes her way to the auditorium with Terri and Chris, two of her closest team members. As she enters the building several people greet her and wish her well for the presentation. She feels clear support from over half of the company's leadership, but there are still a number of leaders that are cynical about change or who are concerned that they will lose the empires they have built. Kathleen knows she needs to convince those wary of the value of the proposed change to the organization, and she needs to show the empire builders the leadership opportunities available to them as the company shifts away from a vertical, silo way of working toward the creation of autonomous and empowered cross-functional teams that work together across value streams.

The room is filling up with the company's leadership, including managers, directors, vice-presidents, fellows, and Six Sigma master experts from all of the functional groups and product lines. Brad Nelson, the company CEO makes his way to the front, shaking hands and greeting people along the way. Kathleen catches up to him and they walk side-by-side to the front of the room. Before she knows it, they are on stage and Brad is introducing her.

"Please welcome Chief Architect, Dr. Kathleen Stone. She is the inspiration behind our Business Architecture and the new organizational design."

The room fills with applause.

Kathleen thanks Brad and begins her presentation with a vision for the future.

She begins, "I'd like to start at the end."

"That is," she continues, "I'd like to help you imagine what things might look like if we already worked in a digital enterprise. So, I'm going to ask you to sit back, close your eyes, take a deep breath, exhale fully, and just imagine."

Kathleen waits for the room to settle.

"Now, imagine that we work for a company that has broken down all functional silos. In this company, we work together across value streams and are accountable for achieving common goals and objectives. Each team has a shared funding model. Business value is delivered on all technology investment decisions. Customers are happy with their experience. This company has mastered the use of Agile practices from strategy all the way through execution and operations. In this company, the IT department is no longer taking orders from the business. IT has a seat at the table with the business and is seen as a strategic partner. There is no "business" or "IT"; it is one and the same. Strategy development is not just a once-a-year occurrence. Instead, business and IT work hand-in-hand continuously to make incremental improvements, and we control the products and the supporting backbone we need to deliver value digitally. The result is a team of teams that is capable of delivering our products on time with the quality and innovation that delights our customers."

She pauses for a moment. "Now open your eyes." She smiles as her audience opens their eyes. They blink and look around at each other.

"Congratulations! From here on out, you are part of our journey to make that imagined vision of our digital enterprise a reality."
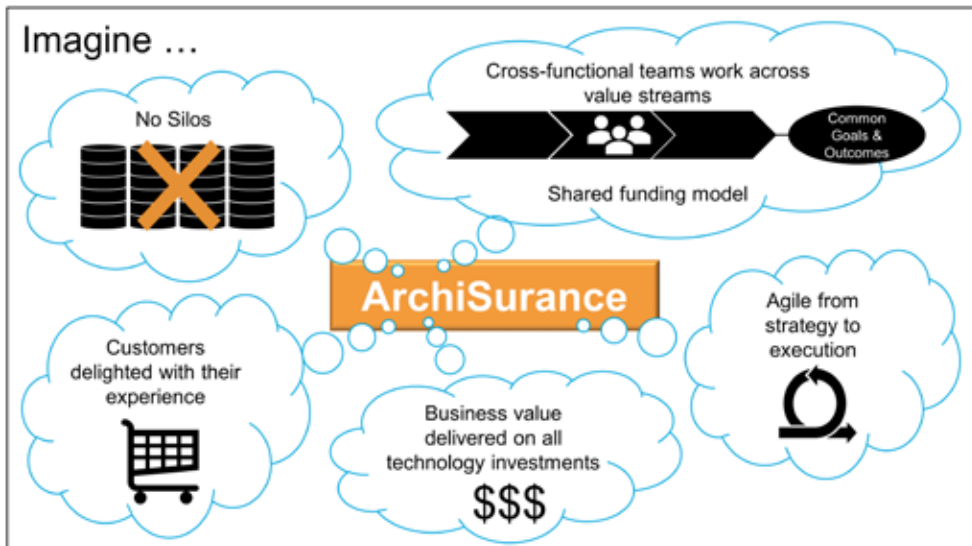
The Open Group (2021)

Figure 1. Imagine Our Digital Enterprise

Kathleen goes on to talk about ArchiSurance's earlier accomplishment of merging three companies into one. The streamlining of processes and the rationalization of systems that has been done so far, she points out, has left ArchiSurance in a good position to optimize the organizational structure with cross-functional teams.

"We have made great strides in Agile development through our DevOps initiative, but did we really go beyond the implementation of Agile ceremonies? Is it really Dev and Ops? I think if we are honest with ourselves, we did not change much more than the introduction of scrumming as a way to develop software and we kept everything else the same. So now it is time to get our core operational value streams in order with teams that work together."

Kathleen then shares the news that her Enterprise Architecture team has been working with business representatives, strategy leaders, and Portfolio Managers to develop key value streams that will be rolled out over the coming year. Each value stream will have its own funding and will have a cross-functional team that will sustain it from strategy through execution to operations. The cross-functional teams will be supported by a newly formed Office of Digital Products.

Kathleen flashes up **Figure 2**, a Business Architecture model of a key value stream,[3] and talks about the capability assessment that was performed for each stage to determine opportunities that can be prioritized and worked by cross-functional stream-aligned teams. Each capability assessment had taken two to three weeks with dedicated resources from Business, Strategy, Architecture, and Portfolio Management. Additional resources had been brought in as needed once the gaps and opportunities were identified and prioritized.

"We had," adds Kathleen, "already identified some of the gaps due to a high-level assessment that was completed at the end of last year. They included our ability to execute digital customer management and data-driven insurance product offerings."
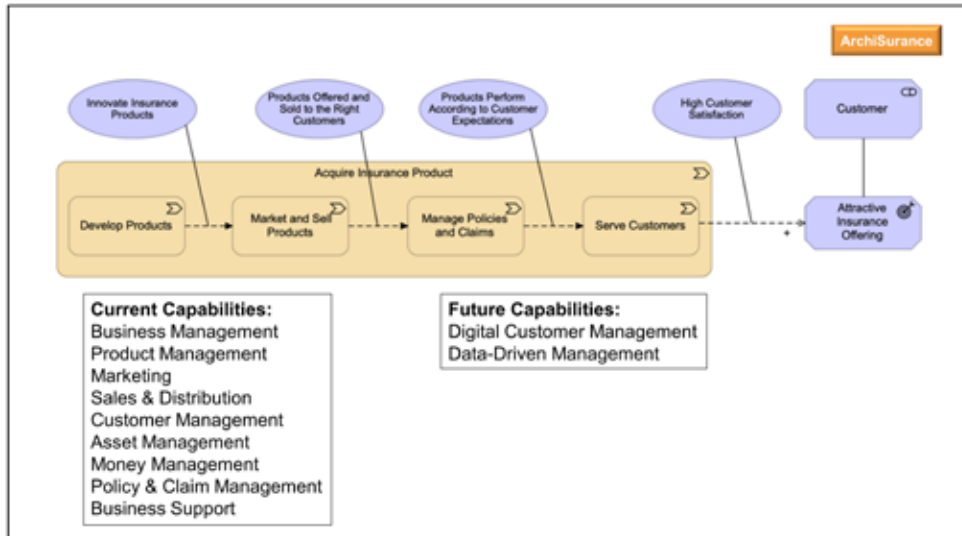

Figure 2. Value Stream and Capabilities to Assess

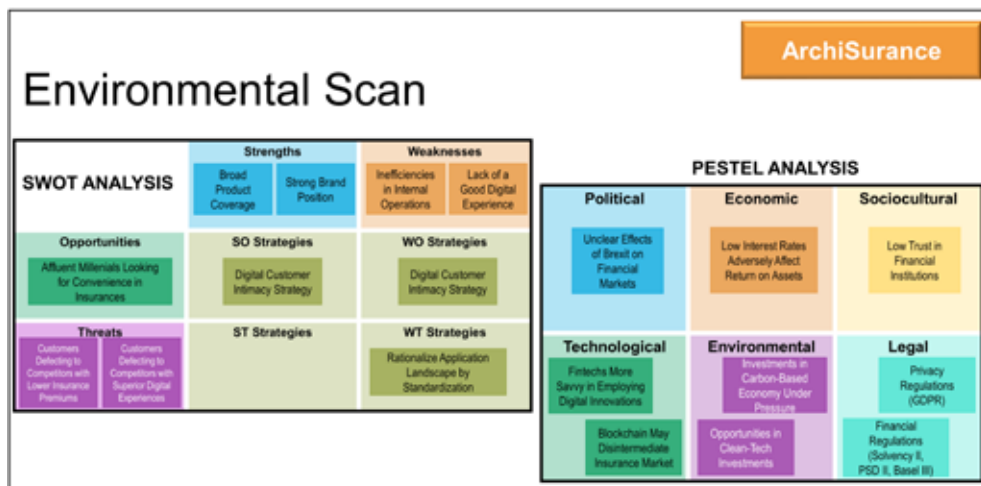Kathleen brought up the next slide, **Figure 3**.

Figure 3. Environmental Scan

"Here are the results of the environmental scan we did with our stakeholders. First, we used a SWOT analysis to gather individual stakeholder assessments on our strengths, weaknesses, opportunities, and threats using a questionnaire for them to complete. Then we brought the stakeholders together to synthesize all of the

information collected. As you can see from the slide (**Figure 3**), we also completed a PESTEL analysis[4] to get a sense of all of the external factors (political, economic, sociocultural, technological, environmental, and legal) influencing our environment. The results of this environmental scan informed our Business Architecture. We believe this kind of input from our key stakeholders, including customer representation, will drive wise investments in our digital products" [14].

Kathleen moves to the next slide, **Figure 4**. "This is an organization map [15]. It will help us with the initiative we are embarking on; to improve our understanding of the organization, strategic planning, organization context for deployment, communication, and collaboration."

"I combined this organization map with guidance from a recent book called Team Topologies: Organizing Business and Technology Teams for Fast Flow by Matthew Skelton and Manuel Pais [10], which introduces the concept of stream-aligned teams to provide an even more Agile way to structure ourselves to achieve our objectives."
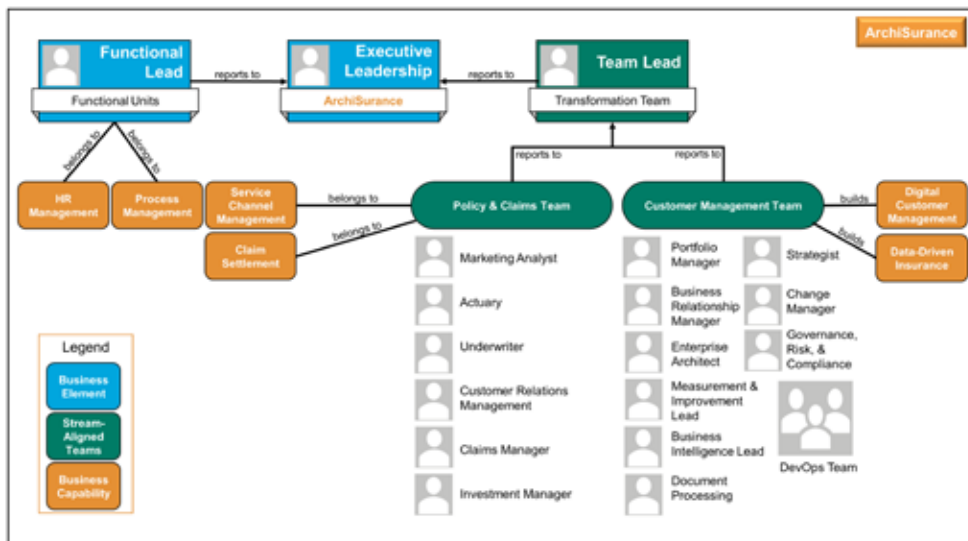

Figure 4. New Organization Map

Kathleen had designed the team structure in such a way that the teams are as autonomous and self-organizing as possible. The teams can each make decisions; the aim being to minimize dependency on other teams. This level of autonomy and self-organization may not always be possible and over time she knows the organization might have to shift the focus of teams, but the aim is to create flow and drive value.

She goes on to say, "One immediate gain expected from this new way of working in cross-functional teams will come from productivity driven by aligned roles, processes, information, and tools as well as new capabilities identified from

technology and automation opportunities. Many of the essential capabilities are noted on this chart and are linked to the responsible group. The stream-aligned teams will be optimized for the flow of work and the Platform team (not shown) will allow the stream-aligned teams to focus on day-to-day activities while they provide support. Note the relationship of each team for building the digital value delivery we have identified. Common goals will be agreed upon across each value stream, which will shift the focus to identifying technology investment priorities as a team. The result will be higher customer retention, increased market share, revenue increases, and productivity improvements."

As she concludes her presentation with a high-level roadmap of the value stream implementations that will support the Digital Customer Intimacy strategic theme, Kathleen remembers that in meetings like this, where she is communicating to upper management and the lines of business, she should close using their language and summarize the business benefits.

"Now," says Kathleen, squaring her shoulders and turning to make eye contact with the most influential leader in the room, "I want to bring it back to what this initiative makes possible for our business going forward. When we re-orient ourselves to optimize the value streams that most impact our customers, you will see faster delivery times from Idea to product, better ability to return customer feedback and requirements into the product delivery lifecycle, increasing product satisfaction ratings from customers over time, all of which should strengthen and grow our competitive advantage in the market. So, what questions can I answer for you?"

The presentation is well received. After a few questions, Brad steps back onto the stage of the auditorium to thank Kathleen. Kathleen expected Brad to form a working group to help in validating what would be adopted from this plan but, to her surprise, Brad announces he has been talking to all the business leaders on the plan and they are fully behind this new approach and are looking forward to the first results over the coming months. In short, this means the approval has been given to begin work immediately on the first value stream, which is more than she had expected. Brad closes the town hall meeting, and they walk off the stage together.

"Good job," says Brad, with a smile. "Thanks for getting the organization behind this plan in such a collaborative manner. That's what I expect from the Enterprise Architects; leading by example, not designing from a distance. Keep it up and keep me posted!"

Kathleen watches as Brad walks away. She is really surprised. She knew he would have been informed of the plan, given he put it on the town hall meeting agenda, but she had never presented it in person to him and still he endorsed it in full today. As Brad makes his way through the crowd in the auditorium, Kathleen notices he signals Amy. By the time they leave the auditorium they are in deep conversation.

On the way back to her desk, Kathleen receives a text from Dick, the CIO, to ask her to stop by his office. She makes the detour and arrives at his door with a little apprehension. Was he happy with her presentation and the results?

"Fantastic job, Kathleen. It's really great to see we have such a bright future, and thanks for pulling this all together. I assume you will make sure this transformation gets top priority. Just make sure it has the right attention. Any help you need, don't hesitate to ask."

Still beaming with excitement from the presentation, Dick's comments to Kathleen affirm her feelings that this work is some of the most important going on in the company.

"I look forward, then," he says, "to seeing your budget proposal and monthly Board updates."

Kathleen nods and turns away to continue to her office, but by the time she arrives her thoughts are racing. What did Dick mean, the budget proposal and the monthly reports? She has approval for the transformation as a result of the presentation. Surely, it's clear to the organization which changes need to be made and which product development needs to get started?

Footnotes

[1] The O-AA Standard, Chapter 4: "Architecture Development" (7).
[2] For more information about Conway's Law; refer to: http://www.melconway.com/Home/Conways_Law.html (12).
[3] The ArchiMate® value stream concept can be used to express value creating activities from the level of Porter's value chains (13) downwards. The Acquire Insurance Product is a relatively high-level example that can be decomposed into more concrete value streams.
[4] For more information, refer to: https://en.wikipedia.org/wiki/Market_environment#PESTEL_analysis.